What Is Claimed Is:

- 1. A battery with a protection circuit provided with:
- a power source having at least one battery;

a protection circuit comprising a protection switch interpolated between a load having one end that is grounded and the power source and a detection circuit that detects overcharging or over-discharging of the battery and turns off the protection switch;

a shield member that shields at least the protection switch; and

an insulating member provided between the shield member and the protection circuit and between the shield member and the battery,

wherein the shield member is connected to one end of the load in a DC fashion, and

wherein the shield member is connected to an electrode other than a negative electrode of the battery that is connected to one end of the load in a high frequency fashion.

2. The battery with the protection circuit according to claim 1, wherein the battery with the protection circuit is provided with:

a negative electrode terminal connected to a negative electrode of the power source;

a voltage detection terminal connected to a positive electrode of the power source;

an overcurrent detection terminal that is used to measure a current that flows through the protection switch; and

a control terminal that generates a signal to turn off the protection switch,

wherein the shield member shields the voltage detection terminal, the overcurrent detection terminal, and the control terminal.